

ABSTRACT

A switching converter in which an input voltage (U_E) can be switched by means
5 of at least one controlled switch (S) to at least one primary winding (W_p) of a
transformer (UET), with a control circuit (AST) for controlling the switch, to which
control circuit a regulating signal (S_R) in the sense of regulating at least one output
voltage is sent, wherein the power supply of the control circuit (AST) takes place via
the forward voltage of an auxiliary winding ($W1$) of the transformer, a rectifier ($D2$), a
10 capacitor (C) and a series regulator (LAE), on the one hand, and, on the other hand,
starting from the input voltage (U_E), via a current path (R_S) and a storage capacitor
(C_s), and the off-state voltage of an auxiliary winding ($W1$; $W2$), which is rectified by
means of a rectifier ($D4$), is additionally sent to the control circuit (AST) for power
supply, wherein the rectified off-state voltage is used during the operation for
15 supplying the control circuit as long as it has a sufficient voltage level.

Figure 2